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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* KAUSHAL KURAPATI

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Appeal 2009-006709  
Application 09/736,908  
Technology Center 2400

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Decided: February 12, 2010

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Before MAHSHID D. SAADAT, THOMAS S. HAHN, and ELENI  
MANTIS MERCADER, *Administrative Patent Judges*.

MANTIS MERCADER, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Final Rejection of claims 1-22. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Brief (filed May 6, 2008) and the Answer (dated July 21, 2008) for the respective details. Only those arguments actually made by Appellant have been considered in this decision. Arguments which Appellant could have made but chose not to make in the Brief have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

### *Appellant's Invention*

Appellant's invention is directed to a television programming recommender for generating recommendations for one or more items based on the consistency with which an item was selected relative to the number of times the item was offered. The present invention adjusts a conventional program recommender score based on a consistency metric. *See* Spec. 3 and Fig. 4.

Claim 1 is illustrative of the invention and reads as follows:

1. A method for recommending items using a recommending device, comprising the steps of:
  - obtaining a list of one or more available items;
  - obtaining a recommendation score, R, for said one or more available items;
  - calculating, using a processor of the recommending device, an adjustment, A, to said recommendation score, R, based on a consistency which is a ratio of an item being selected by a user relative to the number of times the item was offered, wherein the number of times the item was

offered is greater than one, and wherein the number of times the item was offered and the number of times the item was selected by the user are stored in a memory;

generating, using said processor, a combined recommendation score, C, based on said recommendation score, R, and said adjustment, A; and  
displaying said list on a display unit, wherein said items are displayed in order based on a value of said combined recommendation score, C.

*The Examiner's Rejections*

The Examiner's Answer cites the following prior art references:

Herz	US 5,758,257	May 26, 1998
Ukai	US 7,096,486 B1	Aug. 22, 2006

1. The Examiner rejected claims 1-2, 4, 7-8, 10-12, 14, 17-18, and 20-22 under 35 U.S.C. § 102(e) as being anticipated by Ukai.

2. The Examiner rejected claims 3, 5-6, 9, 13, 15-16, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Ukai in view of Herz.

We note that Appellant argues rejected claims 1-2, 4, 7-8, 10-12, 14, 17-18, and 20-22 together as a group, making particular reference solely to independent claim 1. *See* Br. 6-10. Accordingly, we select claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(vii).

We further note that Appellant argues rejected claims 3, 5-6, 9, 13, 15-16, and 19 as a group, making particular reference solely to claim 3. *See* Br. 10-11. Accordingly, we select claim 3 as representative. *See* 37 C.F.R. § 41.37(c)(1)(vii).

## ISSUES

With respect to claim 1, Appellant (Br. 7) argues that Ukai's view scores 502 and 503 are not used to recommend programs for recording and future viewing. Appellant (Br. 7) further argues that while Ukai's Table 700 is used to calculate a viewer's preference measure and to schedule programs, Table 700 is created based on Table 600 and the database 300, and neither include the view scores 502 and 503.

Appellant (Br. 7-8) asserts that the view scores 502 and 503 are simply historical viewing records for the program and not recommendation scores. Appellant (Br. 8) also argues that the view measure 504 does not constitute an adjustment to the view scores 502 and 503. Furthermore, Appellant (Br. 9) argues that the view measure 504 for a program is the average viewing length based on the total length of the program, and not a ratio of an item being selected by a user relative to the number of times the item was offered and thus, does not constitute "a consistency" as recited in claim 1.

With respect to claim 3, Appellant (Br. 10-11) argues that Herz does not teach that the recommendation score is provided by an explicit program recommender, but only that a customer profile is created based on a customer questionnaire.

Thus, the pivotal issues before us are:

(1). with respect to claim 1, whether Appellant has demonstrated that the Examiner erred in determining that Ukai teaches the limitations of: "calculating, using a processor of the recommending device, an adjustment, A, to said recommendation score, R, based on a consistency which is a ratio of an item being selected by a user relative to the number of times the item

was offered, wherein the number of times the item was offered is greater than one” and “generating, using said processor, a combined recommendation score, C, based on said recommendation score, R, and said adjustment, A;” and

(2). with respect to claim 3, whether Appellant has demonstrated that the Examiner erred in determining that Herz teaches that the “recommendation score, R, is provided by an implicit program recommender.”

#### FINDINGS OF FACT

The record supports the following relevant findings of fact (FF) by a preponderance of the evidence:

1. It remains uncontested by Appellant that Ukai’s Table 700 is used to calculate a viewer’s preference based on the Table 600 and the database 300 (Br. 7).
2. Ukai teaches that the viewer’s view history is reviewed to determine the viewer’s “favorite program” and the viewer is informed of the result of presumption so that the viewer’s selecting work can be lightened (col. 2, ll. 11-34).
3. Ukai further teaches that the view history table 500 includes the program name 501, the view scores 502 and 503, and the program view measure 504 obtained by dividing the sum of the view scores by the number of serials of the series program, i.e., mean view score (col. 5, ll. 40-48, Fig. 5).
4. Ukai teaches that the Table 600, which analyzes the viewer’s preferences, includes adding “a view score shown in the view history

- table 500” to the value of the corresponding item of the total view score column 602 (col. 5, l. 56-col. 6, l. 7, Fig. 6).
5. Ukai in Table 700 indicates the viewer’s preferences for programs including a weighted program view measure in the weighted program view measure section 703 obtained by multiplying a program view measure column 504 of the corresponding program shown in the view history table 500 by a value not smaller than 1 (col. 6, ll. 21-38).
  6. Ukai further teaches that the program view measure 504 is updated every time the view score 502 or 503 is entered (col. 5, ll. 51-53).
  7. Ukai teaches that the view score (i.e., view score 502) is obtained by dividing a view time period by a program time period and thus, a view score of 1 indicates that the program was viewed in its entirety and a view score greater than 1.0 indicates that a recorded program was viewed repeatedly (col. 5, ll. 49-51, col. 5, ll. 53-55, Fig. 5).
  8. Appellant’s specification includes no teaching that the actual value of the recommendation score is adjusted or changed based on the calculated adjustment value (Fig. 3, Spec. 7:29-8:7).
  9. Appellant’s Figure 3 only shows two separate fields for the recommender score R and adjusted recommender score A—not any adjustment values to the recommendation score R.
  10. Herz teaches that a customer profile is created based on a questionnaire or ballot (col. 12, ll. 11-20), an agreement matrix is calculated taking into account the customer profile to determine the customer’s preferences for different programs (col. 19, l. 6-col. 21, l. 67), and the customer profiles/agreement matrix are used in

- scheduling television recordings and monitoring is performed to update/adjust those profiles (col. 24, l. 56-col. 27, l. 6).
11. Herz teaches an example wherein the agreement matrix indicates based on scoring that “John prefers ‘Star Trek’, ‘Terminator IT’, and ‘Aliens’” (col. 21, ll. 63-67).
12. In Herz’s example the program Star Trek had a score of 0.418, the program Terminator IT had a score of 0.429, and the program Aliens had a score of 0.365 (*see* the first table in col. 21 and the final agreement matrix in col. 21, ll. 55-61).

## PRINCIPLES OF LAW

### *Anticipation*

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

### *Obviousness*

Appellant has to demonstrate error in the Examiner’s position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006).

The claim terms should be given their broadest reasonable meaning in their ordinary usage as such claim terms would be understood by one skilled in the art by way of definitions and the written description. *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

The claims, of course, do not stand alone. Rather, they are part of “a fully integrated written instrument,” . . . consisting principally of a specification that concludes with the claims. For that reason, claims “must be read in view of the



specification, of which they are a part.” . . . . [T]he specification “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.”

*Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005).

## ANALYSIS

### *I. The 35 U.S.C. § 102(e) rejection of claims 1-2, 4, 7-8, 10-12, 14, 17-18, and 20-22 as being anticipated by Ukai*

It is uncontested that Ukai’s Table 700 is used to calculate a viewer’s preference based on the Table 600 and the database 300 (FF 1). However, we do not agree with Appellant’s assertion (Br. 7) that Tables 600 and 700 have nothing to do with the view scores 502 and 503.

Ukai teaches that the viewer’s view history is reviewed to determine the viewer’s “favorite program” and the viewer is informed of the result of presumption so that the viewer’s selecting work can be lightened (FF 2). Ukai further teaches that the view history table 500 includes the program name 501, the view scores 502 and 503, and the program view measure 504 obtained by dividing the sum of the view scores by the number of serials of the series program, i.e., mean view score (FF 3).

Ukai teaches that the Table 600, which analyzes the viewer’s preference, includes adding “a view score shown in the view history table 500” to the value of the corresponding item of the total view score column 602 (FF 4). Furthermore, Ukai teaches that Table 700 indicates the viewer’s preference for programs including a weighted program view measure in the weighted program view measure section 703 obtained by multiplying a program view measure column 504 of the corresponding program shown in

the view history table 500 by a value not smaller than 1 (FF 5). Ukai further teaches that the program view measure 504 is updated every time a view score 502 or 503 is entered (FF 6).

Accordingly, we are not persuaded by Appellant's argument (Br. 7) that Ukai's Table 700 is used to calculate a viewer's preference measure and to schedule programs based on Table 600 and the database 300, and not based on the view scores 502 and 503. As stated *supra*, Ukai teaches that Table 600 includes view score column 602 which is updated based on the view scores 502 and 503 of the Table 500 and that the Table 700 provides a recommendation based on the program view measure column 504, which is in turn updated every time a view score 502 or 503 is entered (FF 3-6). Accordingly, we also do not agree with Appellant (Br. 7) that Ukai's view scores 502 and 503 are not used to recommend programs for recording and future viewing because the view scores 502 and 503 are used to calculate a viewer's preference measure (Table 700) and to make a recommendation to the viewer as to a "favorite program" (FF 2-6).

Accordingly, Ukai teaches generating, a combined recommendation score, C, (i.e., Table 700 recommendation) based on said recommendation score, R, (i.e., view scores 502 and/or 503) and an adjustment, A (i.e., view measure column 504).

We also do not agree with Appellant's argument (Br. 7-8) that the view scores 502 and 503 are simply a historical viewing record for the program and not a recommendation score.

As stated *supra*, Ukai teaches that the viewer's view history is reviewed to determine the viewer's "favorite program" and the viewer is informed of the result of presumption so that the viewer's selecting work can

be lightened (FF 2). The view score (i.e., view score 502) is obtained by dividing a view time period by a program time period and thus, a view score of 1 indicates that the program was viewed in its entirety and a view score greater than 1.0 indicates that a recorded program was viewed repeatedly (FF 7). Thus, we agree with the Examiner's reasoning that view scores (i.e., 502 or 503) constitute preference/recommendation scores of how much the user enjoys viewing the program. The preference/recommendation is indicated as a factor of 1 wherein a score of 1 would indicate that the viewer saw the program in its entirety, and whereas a view score of less than 1 (e.g., 0.8) would indicate that the viewer did not see the program in its entirety. A view score greater than 1 would indicate that the viewer saw the recorded program repeatedly (FF 7).

We also remain unpersuaded by Appellant's argument (Br. 8) that the view measure 504 does not constitute an adjustment to the view scores 502 and 503, and by Appellant's argument (Br. 9) that the view measure 504 for a program is the average viewing length based on the total length of the program, and not a ratio of an item being selected by a user relative to the number of times the item was offered (i.e., "a consistency").

At the outset we agree with the Examiner (Ans. 10-11), that the claim 1 limitation only recites: "calculating, using a processor of the recommending device, an adjustment, A, to said recommendation score, R" and does not positively recite that the value of R is adjusted or changed but rather that an adjustment is calculated to the recommendation score. Claim 1 defines an "adjustment, A" as being "based on a consistency which is a ratio of an item being selected by a user relative to the number of times the item was offered".

As stated above, Ukai teaches that the view history table 500 includes the program name 501, the view scores 502 and 503, and the program view measure 504 obtained by dividing the sum of the view scores by the number of serials of the series program, i.e., mean view score (FF 3). Thus, clearly view measure 504 is the ratio of a program being selected by a user (i.e., the sum of the view scores 502, 503, etc.) relative to the number of times the item was offered (i.e., the total number of view scores for only view scores 502 and 503 would be 2). Accordingly, the view measure 504 constitutes an adjustment based on “a consistency.” Furthermore, Ukai teaches that the program view measure 504 is updated every time the view score 502 or 503 is entered (FF 6). Thus, the view measure 504 is determined relative to the number of times the item was offered and updated accordingly.

We also agree with the Examiner (Ans. 11) that by using a first view score 502 and a second view score 503, the calculation of a program view measure 504 is representative of an adjustment to the first and the second video scores 502/503 because the program view measure 504 is representative of an average of two view scores. Thus, if a first view score is 0.6 and a second view score is 0.8, a program view measure for the two view scores would be 0.7, therefore the first view score is being adjusted by an adjustment of +0.1 and the second view score is being adjusted by an adjustment of -0.1. We also agree with the Examiner (Ans. 11) that this interpretation is consistent with Appellant’s specification which fails to teach that the actual value of the recommendation score is adjusted or changed based on the calculated adjustment value (FF 8). Appellant’s Figure 3 only shows two separate fields for the recommender score R and adjusted recommender score A—not any adjustment values to the

recommendation score R (FF 9). As stated *supra*, Appellant's specification is the single best guide to the meaning of a disputed term. *See Phillips*, 415 F.3d 1315.

For the foregoing reasons, since Appellant has not shown error in the Examiner's position, the 35 U.S.C. § 102(e) rejection of independent claim 1 is sustained. We will also sustain the rejection of claims 2, 4, 7-8, 10-12, 14, 17-18, and 20-22, which fall with claim 1.

*II. The 35 U.S.C. § 103(a) rejection of claims 3, 5-6, 9, 13, 15-16, and 19.*

Herz teaches that a customer profile is created based on a questionnaire or ballot, an agreement matrix is calculated taking into account the customer profile to determine the customer's preference of different programs, and the customer profiles/agreement matrix are used in scheduling television recordings and monitoring is performed to update/adjust those profiles (FF 10). Herz provides an example wherein the agreement matrix indicates based on scoring that "John prefers 'Star Trek', 'Terminator IT', and 'Aliens'" (FF 11). In Herz's example the program Star Trek had a score of 0.418, the program Terminator IT had a score of 0.429, and the program Aliens had a score of 0.365 (FF 12). Thus, contrary to Appellant's argument (Br. 10-11), Herz provides the missing teaching from Ukai of the recommendation score, R, being provided by an explicit program recommender, i.e., input provided by customer in a customer profile's which is being used to determine the recommendation scores for different programs.

Accordingly, we will also sustain the Examiner's 35 U.S.C. § 103(a) rejection of claim 3 and claims 5-6, 9, 13, 15-16, and 19, which fall with claim 3.

### CONCLUSIONS

Appellant has not demonstrated that the Examiner erred in determining that Ukai teaches the limitations of: “calculating, using a processor of the recommending device, an adjustment, A, to said recommendation score, R, based on a consistency which is a ratio of an item being selected by a user relative to the number of times the item was offered, wherein the number of times the item was offered is greater than one” and “generating, using said processor, a combined recommendation score, C, based on said recommendation score, R, and said adjustment, A.”

Appellant has not demonstrated that the Examiner erred in determining that Herz teaches that the “recommendation score, R, is provided by an implicit program recommender.”

### DECISION

The Examiner's decision rejecting claims 1-22, all of the appealed claims, is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

### AFFIRMED

Appeal 2009-006709  
Application 09/736,908

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